



INSTALLATION AND OPERATION MANUAL

HEARTH PRODUCTS



Free-Standing Pellet Stove

**Retain These Instructions
For Future Reference**

P/N 775,228M, Rev. A, 05/2007



Pellet Stoves Model Winslow™ (PS40)

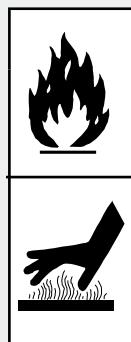
A French manual is available upon request. Order P/N 775,228CF.

Ce manuel d'installation est disponible en français, simplement en faire la demande. Numéro de la pièce 775,228CF.

These appliances must be properly installed and operated in order to prevent the possibility of a house fire. Please read this entire installation and operation manual before installing and using your wood stove. Failure to follow these instructions could result in property damage, bodily injury or even death. Contact your local building or fire officials to obtain a permit and information on any installation requirements and inspection requirements in your area.



Report No. 050-S-13-2



⚠️ **WARNINGS**

- **Hot! Do not touch! The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burns may result.**
- **Carefully supervise children in the same room as appliance.**
- **Lennox™ pellet-burning appliances are designed for use as a supplemental heater. They are not intended for continuous use as a primary heat source.**

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Features and Specifications

INSTALLATION OPTIONS

- Residential
- Vented vertical and horizontal (see venting instructions)
- Manufactured home and mobile home
- Thermostat or manual operation
- Bedrooms

HEATING

- Max. feed rate is 4.7 pounds/hour or 39,500 BTU/hour
- Min. feed rate is 1.8 pounds/hour or 15,120 BTU/hour

VENTING

This stove is approved for venting with Type L and Type PL pellet vent pipe. The flue collar on the stove accepts 3" diameter pipe.

The combustion air for this stove is drawn through a pipe at the lower rear of the stove. For mobile home installations a 3" ID flex line or pipe must be attached to the stove's air intake to draw air from outside the house. The vent pipe can be installed vertically or horizontally (see Venting section for recommended installations).

ELECTRICAL

- The stove requires 120 volts AC for operation.
- Maximum wattage is 700.
- Igniter wattage is 400.
- Normal operating wattage is 300.

THERMOSTAT

This stove can be operated manually or with a thermostat.

LIGHTING

This stove is equipped with an electric self igniter for ease of ignition.

FUEL SPECIFICATIONS

This stove is designed to burn wood pellet fuel. In addition, a corn/wood pellet mixture, with a maximum of 50 percent corn can be burned. Burning any other fuel that is not approved for use with this appliance will void the appliance warranty. **IMPORTANT: The corn/wood mix needs to be mixed evenly before being put in the Winslow™ pellet stove hopper.**

Wood Pellet Specifications: This appliance has been designed to burn wood residue pellets with up to 3% ash content. Dirty fuel will adversely affect the performance of the stove. Any questions regarding pellet fuel can be answered at the Pellet Fuels Institute (PFI), www.pelletheat.org.

CAUTION: THE USE OF UNAPPROVED, DIRTY, WET AND/OR HIGH SALT CONTENT FUEL WILL VOID THE WARRANTY!

Wood pellets manufactured to the pellet fuels institute (P.F.I.) certification standard are available in two grades, Standard and Premium. The primary difference between the two is the ash content of the pellets.

The P.F.I. specification for standard grade & premium grade residential pellet fuel is as follows:

- CHLORIDES (Salt): Less than 300 p.p.m. to avoid stove and vent rusting.
- BULK DENSITY: 40 lb. / Cu. Ft. minimum
- MOISTURE CONTENT: 8% maximum
- ASH CONTENT: < 3% maximum (standard grade) < 1% maximum (premium grade)
- FINES: 0.5% maximum through a 1/8" screen
- BTU CONTENT: There are a number of variations in pellet fuels that are not included in PFI standards. For example, BTU (heat value) content may range from just under 8,000 to almost 9,000 Btu, depending upon species and region of the country and other variables.

Corn Specifications: Use only clean-shelled corn with a moisture content less than 15% and approximate fuel value of 7000 BTU/lb (16,200 kJ/kg). Do not attempt to burn corn with higher moisture content or burn lesser grade fuels. Do not burn other types of agricultural pellets or byproducts (alfalfa, cherry pits, olive pits, nut shells, etc.) as they are not permitted to be burned in these appliances.

WEIGHT - 265 POUNDS

HOPPER CAPACITY - 60 POUNDS

LISTING INFORMATION

The Winslow™ PS40 stove is safety tested and listed with the following agencies:

- OMNI-Test Laboratories, Inc., Beaverton, Oregon to ASTME 1509
- USEPA List of Exempt Wood Heating Appliances
- List of Colorado Approved Pellet Stoves

APPEARANCE CHOICES

The Winslow PS40 stove can be ordered with the following door trims and grills, log set, and brick panel options:

Door Trim Kits

Black	79038	Black	79000
Gold	79034	Gold	79001
Nickel	79037	Nickel	79002
Brushed Nickel	79035	Brushed Nickel	79022
Black Nickel	79036	Black Nickel	79039

Grill Kits

Log Set - Required H5142

Brick Panel Kit -Required 79030

Stove Dimensions

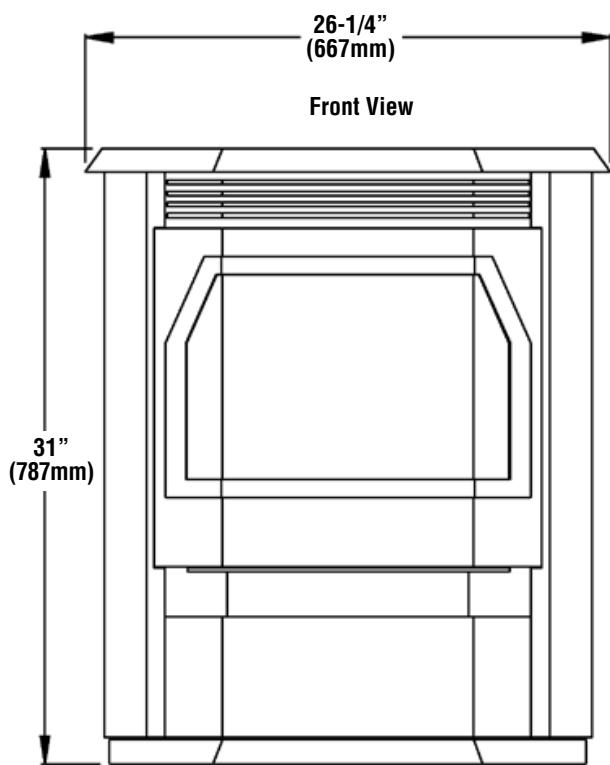


Figure 1

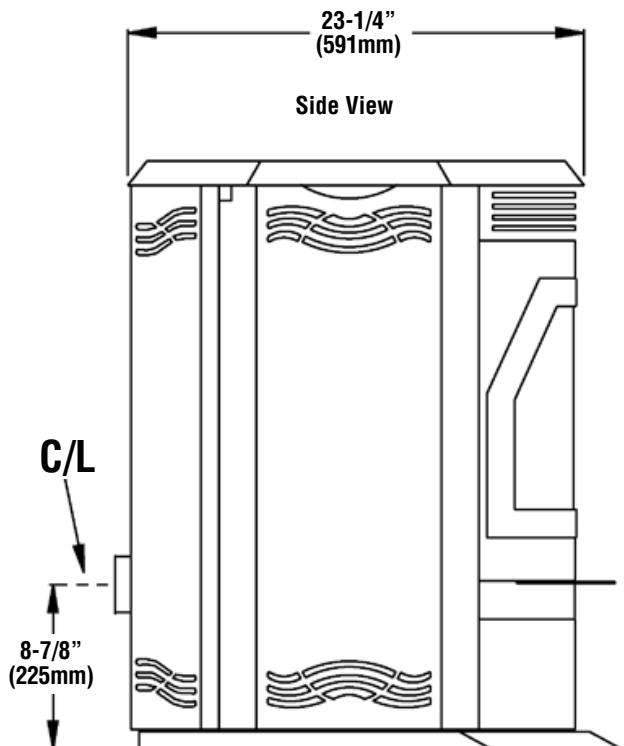


Figure 2

The center of the flue is 8-7/8" above the surface upon which the stove rests.

Clearances to Combustibles

Corner Installations

Left Wall Horizontal Venting

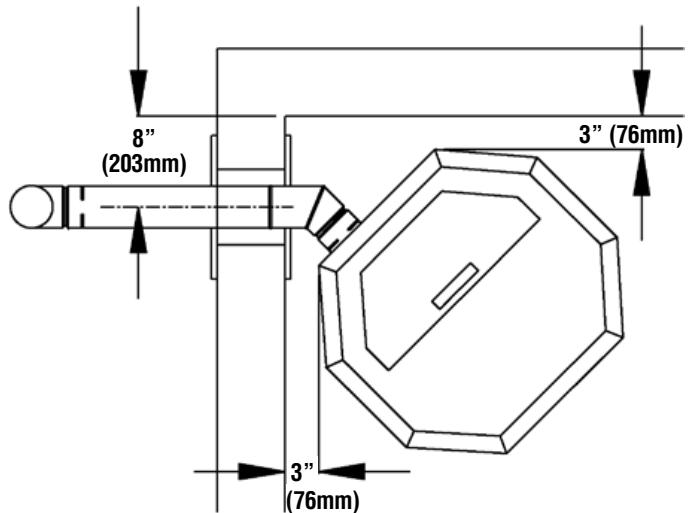


Figure 3

Right Wall Horizontal Venting

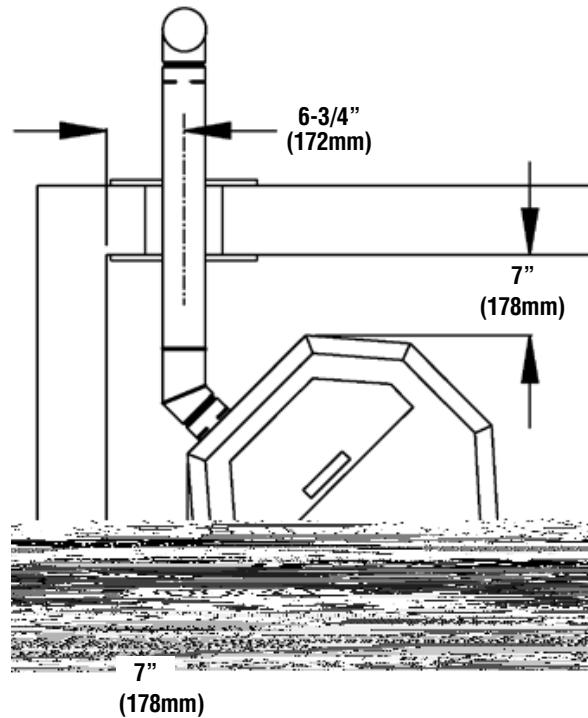


Figure 4

Corner Installations Continued

Vertical Venting

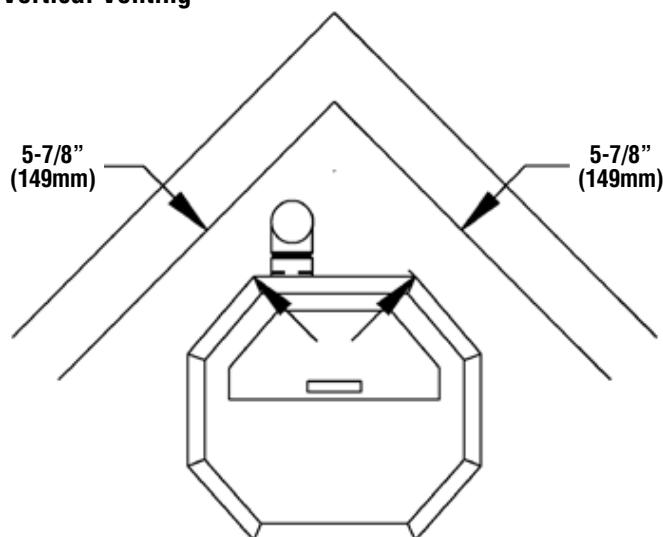


Figure 5

Parallel Installations

Vertical Venting

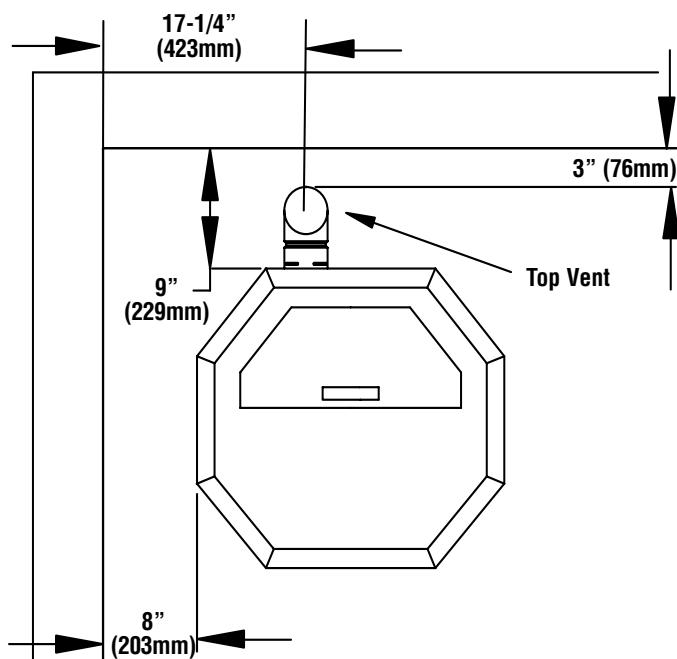


Figure 6

INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

Horizontal Venting

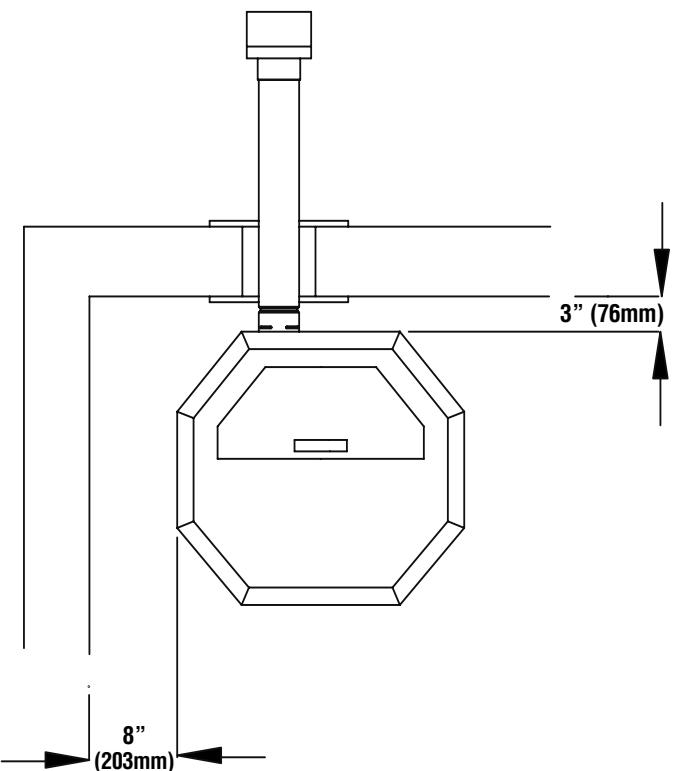


Figure 7

Alcove Installations

Minimum alcove height is 41" (1041mm), minimum width is 42-1/4" (1073mm), and maximum depth is 48" (1219mm). Note, it is quite difficult to load pellets into the hopper when installed in an alcove only 41" (1041mm) high. For alcove wall clearances see parallel clearances below.

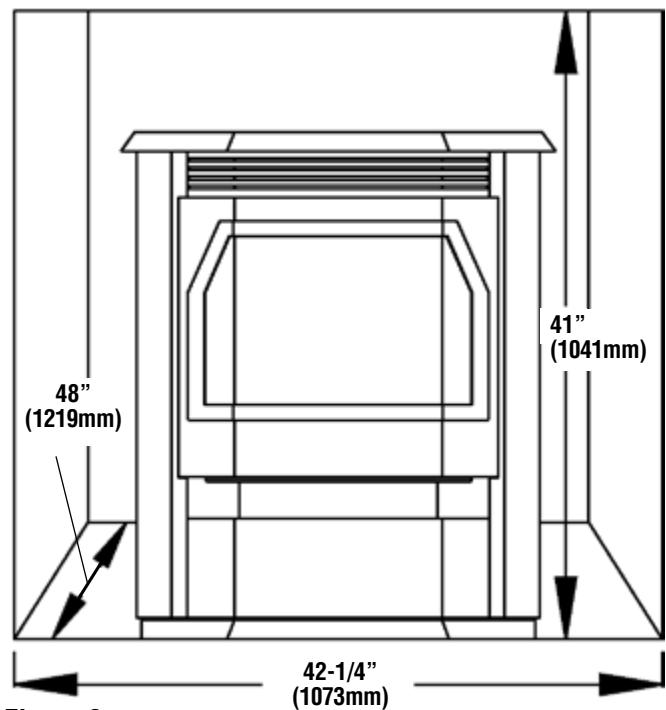


Figure 8

HEARTH PROTECTION

The floor protector must be a non-combustible material extending beneath the stove and to the front and sides as shown below.

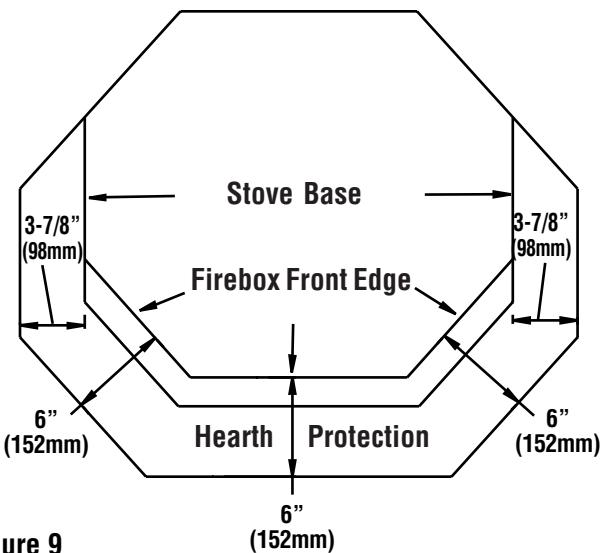


Figure 9

VENT TERMINATION REQUIREMENTS

1. Do not terminate the vent in any enclosed or semi-enclosed areas such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes such as stairwells, covered breezeway, etc.
2. Vent surfaces can become hot enough to cause burns if touched. Non-combustible shielding or guards may be required.
3. Termination must exhaust above the inlet elevation. It is recommended that at least five feet of vertical pipe be installed outside when the stove is vented directly through a wall. This will create a natural draft to prevent the possibility of smoke or odor during appliance shut down or power failure and avoid exposing people or shrubs to high temperatures.
4. The vent should terminate no less than four feet below, no less than four feet horizontally from, and no less than one foot above doors and windows, or gravity/ventilation air inlets into the building.
5. The distance between the bottom of termination and grade should be a minimum of 12" (305mm). The distance between the bottom of the termination and a public walkway should be a minimum of seven feet.
6. Locate the vent termination at least two feet away from combustible materials such as shrubs, plants, grass, fences, roof overhangs, and adjacent buildings.

Minimum Size Hearth Protection

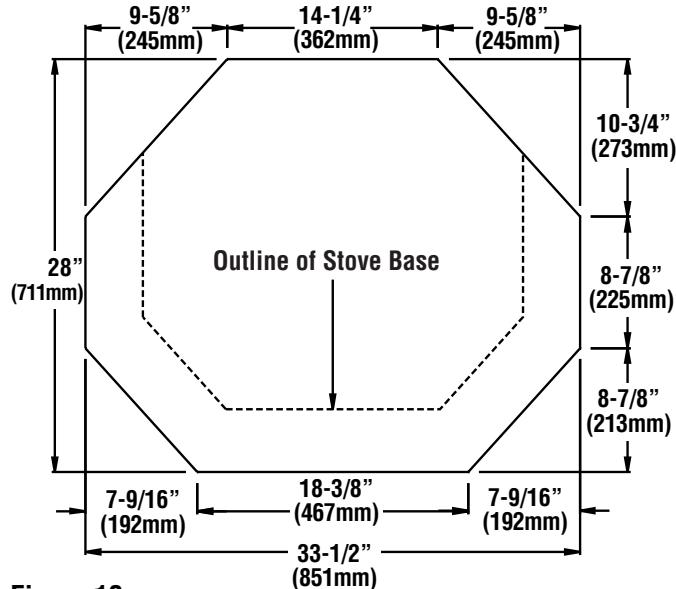
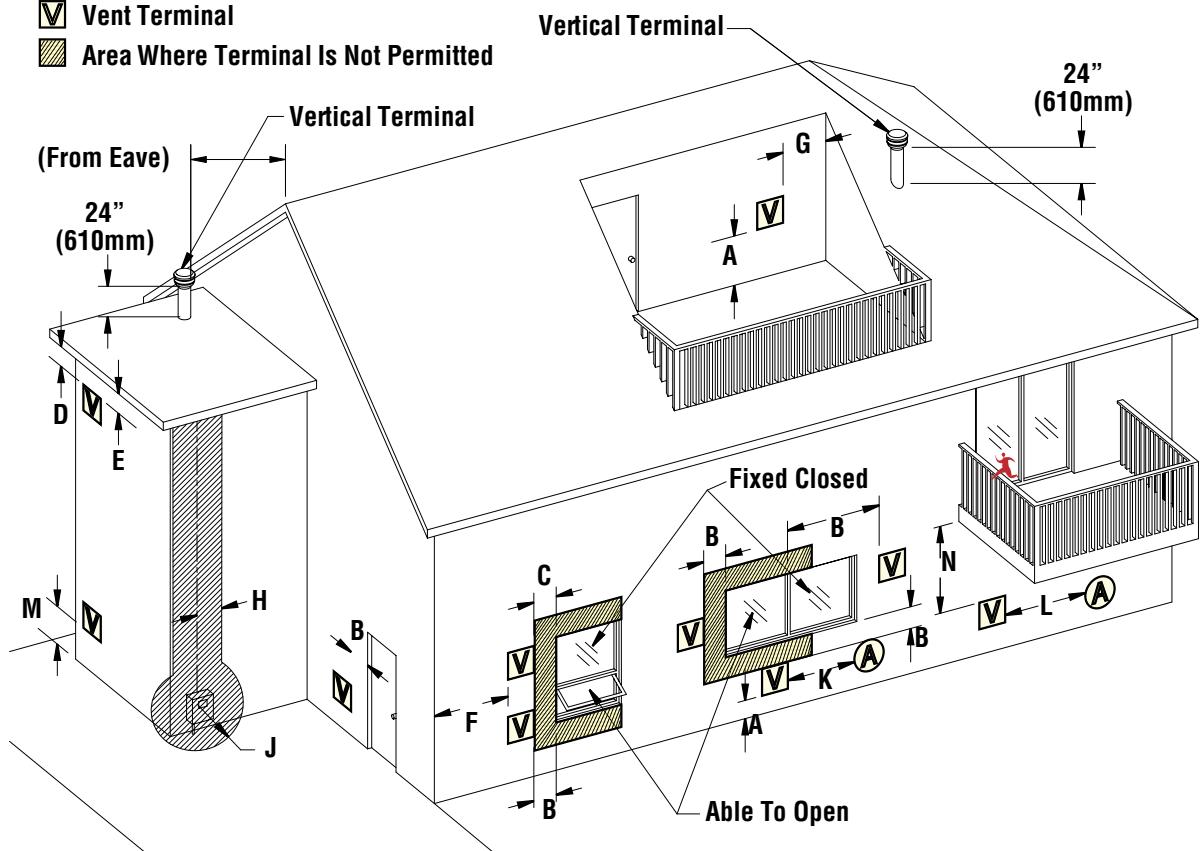


Figure 10

Vent Installation

VENT TERMINATION LOCATIONS

- (A)** Air Supply Inlet
- (V)** Vent Terminal
- Area Where Terminal Is Not Permitted



- A = Clearance above grade, veranda, porch, deck, or balcony (min. 12"/30cm)
- B = Clearance to window or door that may be opened (min. 12"/30cm above - 48"/1.2m below and to the side)
- C = Clearance to permanently closed window *(min. 12"/30cm)
- D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of *(min. 24"/60cm) from the centerline of the terminal (min. 22"/55cm) check with local code.
- E = Clearance to unventilated soffit *(min. 12"/30cm)
- F = Clearance to outside corner *(min. 12"/30cm)
- G = Clearance to inside corner *(min. 12"/30cm)
- H = Not to be installed above a meter/regulator assembly within *(min. 36"/90cm) horizontally from the centerline of the regulator.
- J = Clearance to service regulator vent outlet *(min. 72"/1.8m)
- K = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance *(min. 48"/1.2m)

- L = Clearance to a mechanical air supply inlet *(min. 120"/3.1m)
- M = **Clearance above paved sidewalk or a paved driveway located on public property *(min. 84"/2.1m)
- N = ***Clearance under veranda, porch, deck, or balcony (min. 12"/30cm)

Note:

- * Local codes or regulations may require different clearances.
- ** A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- *** Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Figure 11

VENTING

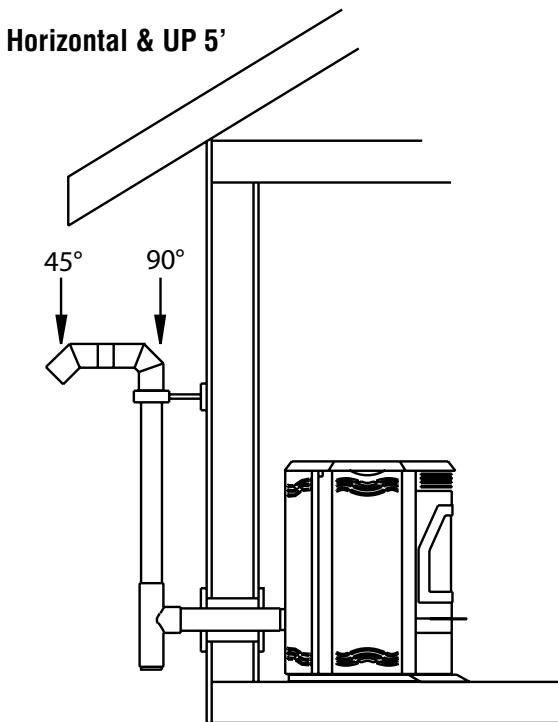
Pellet pipe type PL or L must be used to vent the Winslow™ PS40 stove. Single wall pipe cannot be used with this pellet stove. The stove's flue collar is 3" in diameter. An approved wall thimble or approved ceiling firestop must be used when the pellet pipe passes through a combustible wall or ceiling. The stove's combustion blower pressurizes and pushes flue gases out the pellet pipe. As a result, all pipe joints should be locked together or screwed with three screws if the pipe does not have a locking system and sealed with high temperature silicone. The pipe should be siliconed and fastened with three screws to the stove's flue collar.

The longer the run of pipe and the more elbows used, the greater the resistance to the flow of flue gases. Four inch diameter pellet pipe is recommended for pipe runs greater than 15 feet or when a number of elbows are used.

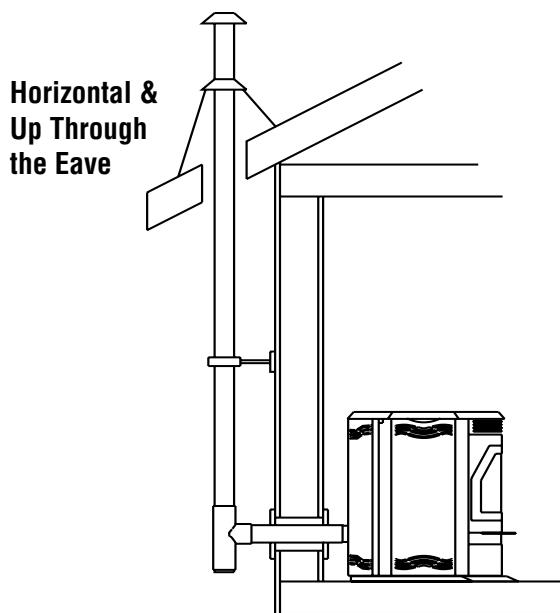
To aid in cleaning, whenever possible, the venting system should include a tee with clean out attached to the flue collar on the stove.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

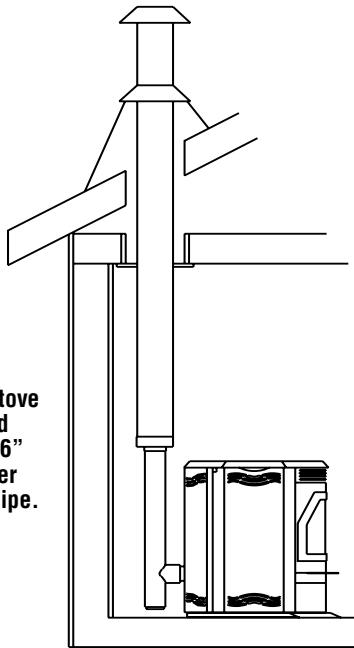
Horizontal installations that terminate without any vertical sections of pipe are approved; however, wind may direct flue gases toward the house causing discoloring problems. For this reason, horizontal and up 5 feet or horizontal and through the eave installations are recommended.



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



**Wood
Stove Pipe
Retrofit**



The Winslow PS40 stove stove can be vented into existing 6" or 8" diameter wood stove pipe.

MASONRY CHIMNEY

When venting into a masonry chimney, the pellet pipe can terminate just inside the chimney. However, it is recommended to run the pellet pipe to the top of the chimney.

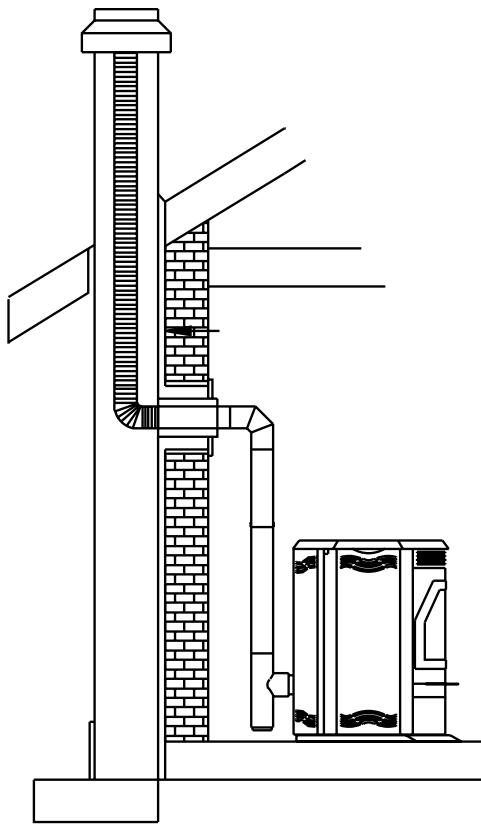


Figure 16

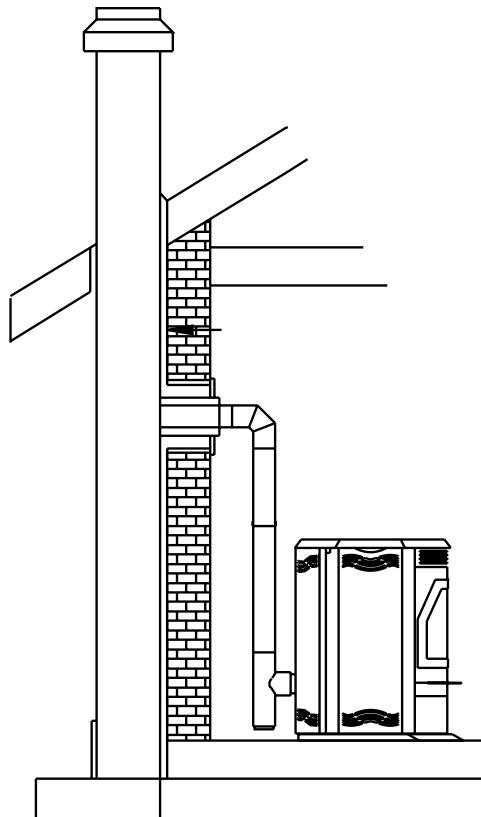


Figure 17

FIREPLACE

When venting into a fireplace chimney, the pellet pipe can terminate just above the damper. However, it is recommended to run the pellet pipe to the top of the chimney.

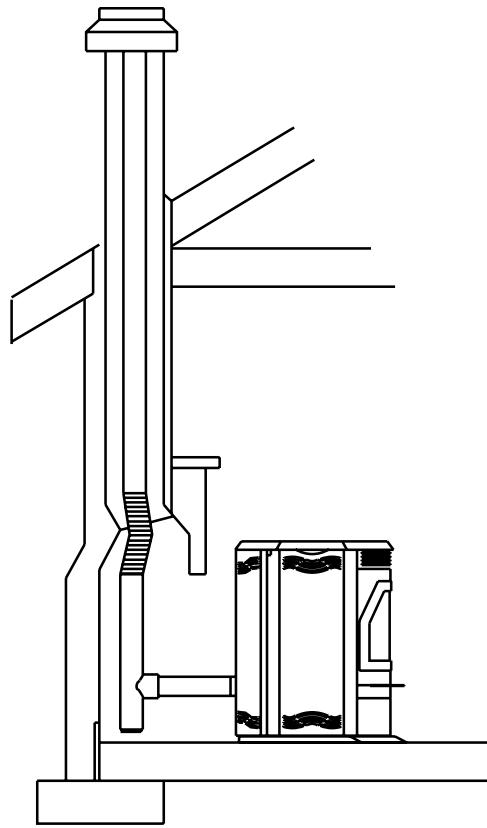


Figure 18

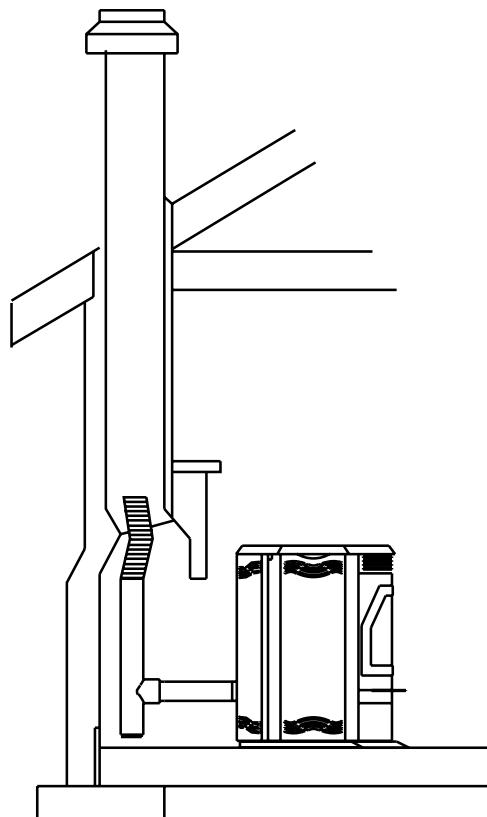


Figure 19

VERTICAL

If the length of pipe exceeds 15 feet, 4 inch pipe rather than 3 inch vent pipe should be used.

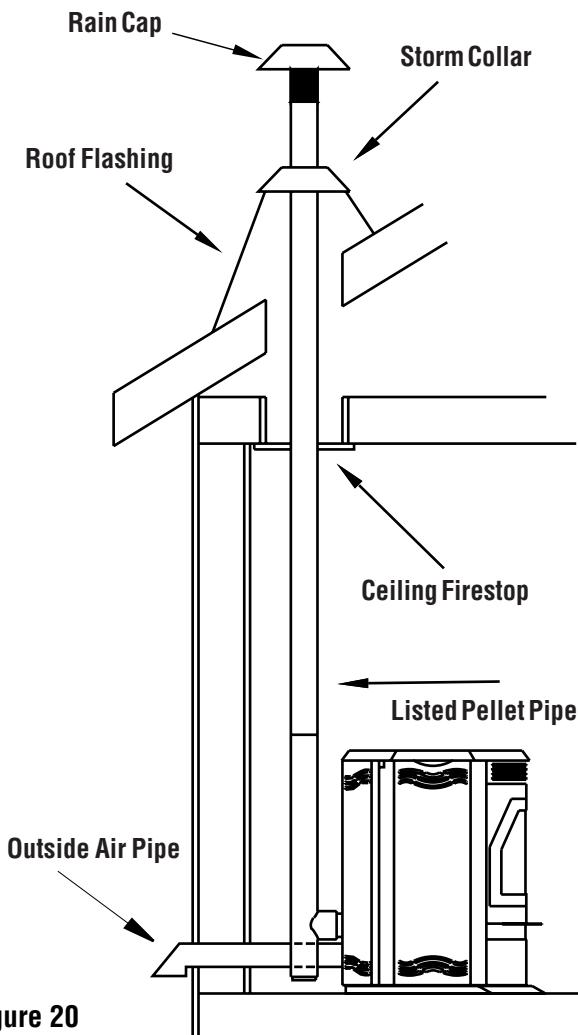


Figure 20

MOBILE HOME INSTALLATIONS

The following are required for installation of the Winslow™ PS40 stove in mobile homes. See Figure 20.

1. Connecting the Winslow PS40 stove to outside combustion air is optional, except in mobile home installations and when required by local building codes. The stove's air intake will accept 3" ID pipe to accommodate outside air installations. The air intake on the exterior of the home should always be located substantially below the flue termination and terminate with a cover to keep out weather and pests.
2. The stove must be fastened to the floor using lag screws. The screws can be inserted through the holes in the pedestal located behind the side doors.
3. The stove must be grounded with a #8 or larger copper wire.

WARNING: DO NOT INSTALL THIS STOVE IN A SLEEPING ROOM IN A MANUFACTURED HOME.

CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.

SURGE PROTECTORS

A surge protector is recommended to ensure the stove's electrical components are not damaged due to a surge in the electrical supply. Only high quality protectors should be used - cheap ones do not provide the protection needed.

OUTSIDE AIR INSTALLATIONS

Connecting the Winslow PS40 stove to outside combustion air is optional, except in mobile home installations and when required by local building codes. The stove's air intake will accept 3" ID pipe to accommodate outside air installations. The air intake on the exterior of the home should always be located substantially below the flue termination and terminate with a cover to keep out weather and pests.

THERMOSTAT INSTALLATION

The Winslow PS40 stove can be operated manually or by thermostat. The stove comes from the factory wired to operate manually - see control board operation on the following page. A low voltage thermostat can be installed on the stove. To install the thermostat:

- 1) Unplug the stove from the electrical outlet. Open the right side door and lift out the control board from its retaining brackets. Locate the light green wiring block at the bottom back of the board (see Figure 21), loosen the two screws B at the back of the block, and remove the U shaped jumper wire A protruding from the block.
- 2) Insert a wire from the thermostat into one of the slots from which the jumper wire was removed. Repeat this process for the other thermostat wire.

Retain the jumper wire for future reinstallation. See page 17 for thermostat operation instructions.

IMPORTANT NOTE: Install the thermostat per the manufacturers instructions, provided with the thermostat. Failure to follow manufacturers instructions could result in a malfunction. Pay special attention to the thermostat location requirements. If the location requirements are not adhered to the appliance, erratic operation or failure may occur.

Do not mount the thermostat where it may be affected by:

- Radiant heat from the stove, fireplaces, sun or other heat sources.
- Drafts or dead spots behind doors or in corners.
- Hot or cold air from ducts.

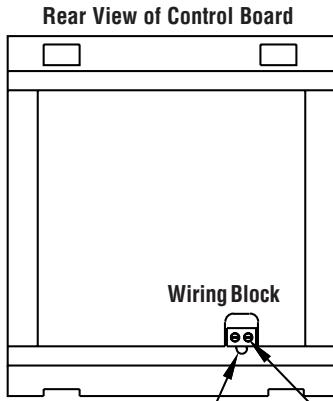


Figure 21A

B

Door Trim Installation Instructions

Parts List (A):

Qty
(2) Trim Pieces (Gold, Nickel, Brushed Nickel or Black Nickel)
(6) #10 nuts
(6) #10 washers

Tools Needed:

Qty
(1) 3/8" nut driver or socket wrench

CAUTION: Always ensure that plated surfaces are clean and free of fingerprints before lighting stove. Fingerprints will leave permanent blemishes if left on plated surface when lit. When installation is complete, the trim should be gently cleaned with soft cloth and either alcohol or glass cleaner. Do not overtighten nuts, overtightening can create visible dimples on the plated surface.

To INSTALL DOOR TRIM:

1. Remove the trim pieces and hardware from its packaging and ensure that all pieces are present before beginning installation. Take care not to scratch finished surfaces.
2. Open right and left side door. The side doors swivel open towards the back of the stove. See Figure 24.
3. Open front door. Put trim in place by inserting trim studs into the corresponding holes in the door (Figures 22 & 25). The top piece of trim will only fit in one direction, but the bottom piece can be installed incorrectly. When placing the bottom piece of trim, make sure there is a 9/16" gap between the top of the trim piece and the glass in the door. (Figure 26)

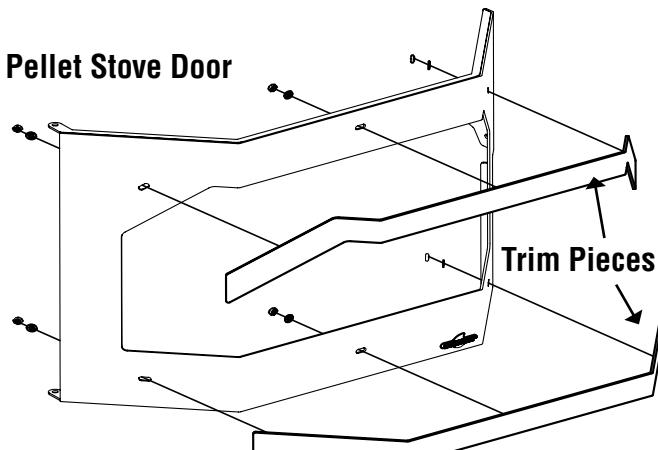


Figure 22

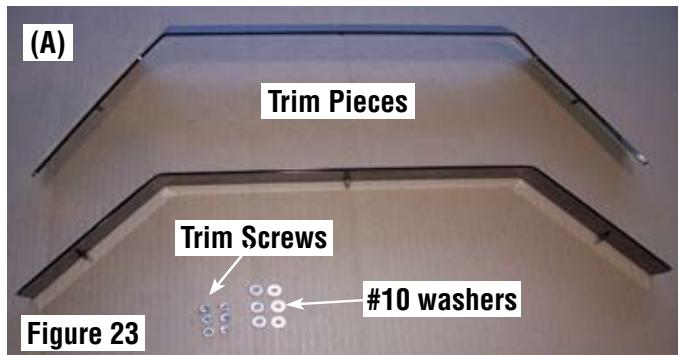


Figure 23

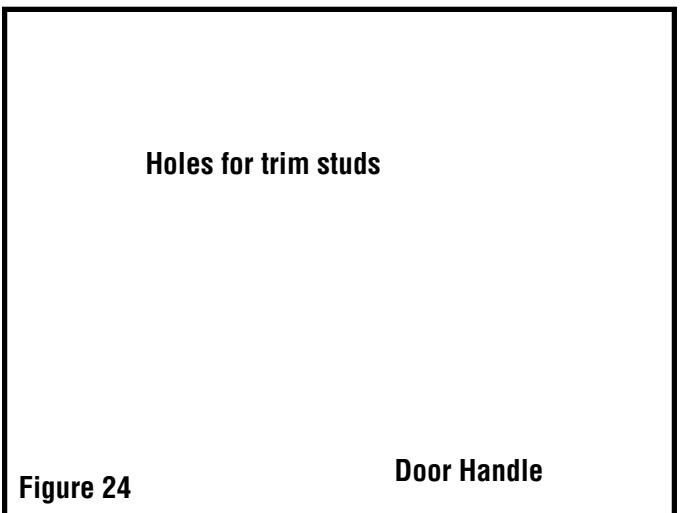


Figure 24



Figure 25



Figure 26

4. Place one washer on each stud. Using a 3/8" nut driver, snug up the nuts on each piece of trim. Do not finish tightening the nuts yet. See Figure 27.
5. There should be approximately a 7/8" (22mm) gap between the top edge of the upper trim and the top edge of the door and a 1-1/2" (38mm) gap between the bottom trim to the bottom of the door. Visually inspect the alignment of the trim and adjust if necessary. See Figure 28.
6. Finish tightening nuts. **CAUTION - DO NOT OVER-TIGHTEN NUTS, DIMPLING OF THE TRIM WILL OCCUR!!!**



Figure 27



Figure 28

Door Grill Installation Instructions

Parts Needed:

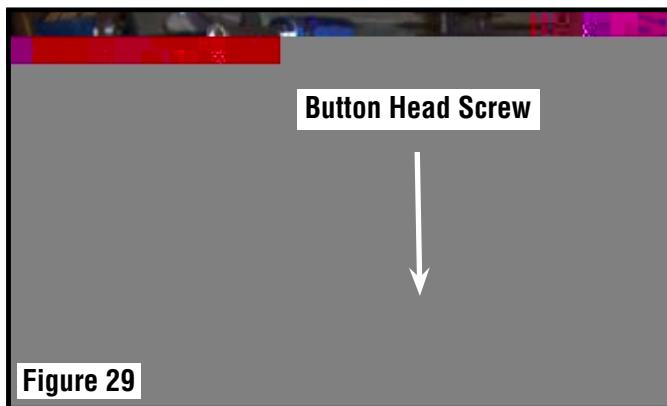
Qty
(4) Button Head Screws (already in place in stove)

Tools Required:

Qty
(1) 1/8" allen wrench

To install the Grill:

1. Remove the four button head screws from body of the stove with a 1/8" allen wrench. See Figure 29.



2. Pull the scraper rod out, rotate the grill vertically, (with the notch to the left) and slide the grill over the scraper rod (slide the rod between the third and fourth bar). See Figure 30.



3. Rotate the grill back to the horizontal position and re-install the four button head screws through the two holes at each end of the grill and into the stove body. See Figure 31.



Brick Panel Installation

Option: Part #79030

Kit Contents:

- Brick Panel (A)
- 4 Tap Tights (B)

Tools Required:

- Drill (90° drill recommended)
- #18 drill bit
- 5/32 allen wrench

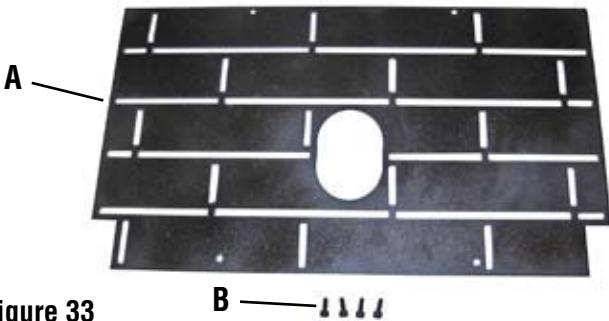


Figure 33

Note: The brick panel comes pre-painted with Metallic Black paint. The brick panel may be painted with any color of Stove Bright® high-temp paint (paint may discolor with use).

1. Remove the front door of the pellet stove. To remove the front door, open the two side panels, swing open the front door, and lift it up and off of its hinges. Remove the optional log set, if present, and the burn pot.



Figure 34

2. Remove all pellets and ash from the firebox to ensure a proper fit for the brick panel.

3. Insert the brick panel, top first, as shown in Figure 35. The two cut out corners should be at the bottom.



Figure 35

4. Make sure that the brick panel is centered, with equal space on either side of the auger tube. While holding the panel in place, use the drill with a #18 drill bit to drill out the four holes in the back of the firebox, as shown in Figure 36.



Figure 36

Log Set installation Instructions

Kit Contents (A):

Part #H5142

Qty

- (1) left log (B)
- (1) right log (C)
- (1) front log (D)
- (2) log support brackets (E)

A - Kit Contents



Figure 38

Tools Required:

None

Caution: The logs can be damaged if they are not handled with care!

To Install the log set:

1. Remove the two log support brackets from the box and bend the ends of the brackets 90 degrees at the cut lines. See Figure 39.
2. One bracket goes into the left corner and the other into the right corner of the firebox. Rotate the brackets so they are placed as shown in Figure 40. The bracket fits between the back of the firebox and the air wash at the front of the stove.
3. Remove the ceramic logs from the box and carefully unwrap them. Position each back log (Figure 41, B, C) in their proper place, one on each side against the back of the firebox.
4. The front log should face the front of the firebox with the woodgrain showing. It should rest on the other two back logs. See Figure 41 for assembled log set.

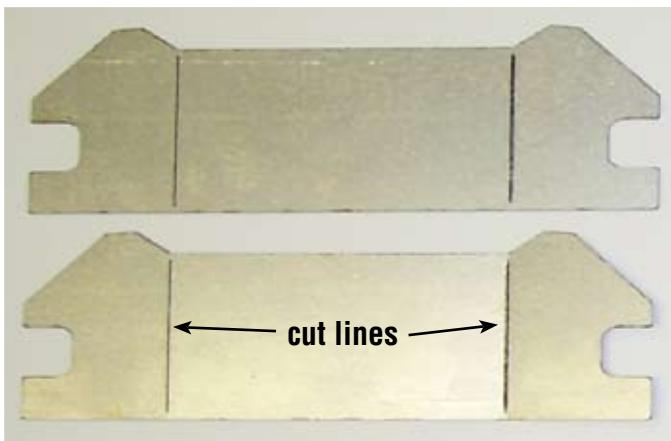


Figure 39

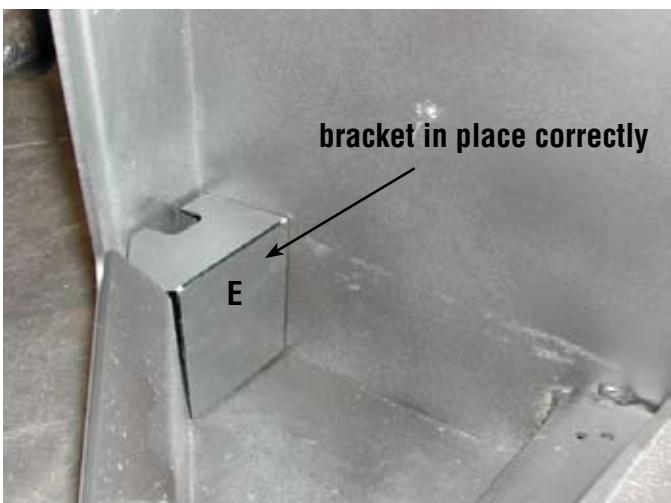


Figure 40

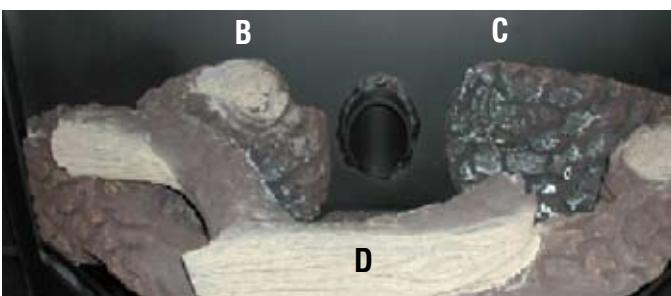


Figure 41

Operation

CONTROL BOARD

The control board regulates all functions of the stove. The following is a list of the board's components:

- **Feeding light** - lights up when the auger is feeding pellets into the burn pot.
- **Ready Light** - lights up when stove is ready to operate. Igniting Light - lights up when the stove is in the ignition sequence.
- **Start Button** - is pushed to start the ignition sequence after the heat selector knob is turned from off.
- Heat Selector Knob - is turned to off to shut the stove off or turned to a setting from 1 to high to regulate the burn rate.
- **Igniter Fuse** - six amp fuse to protect igniter heating element.
- **Control Fuse** - three amp fuse to protect the control board.

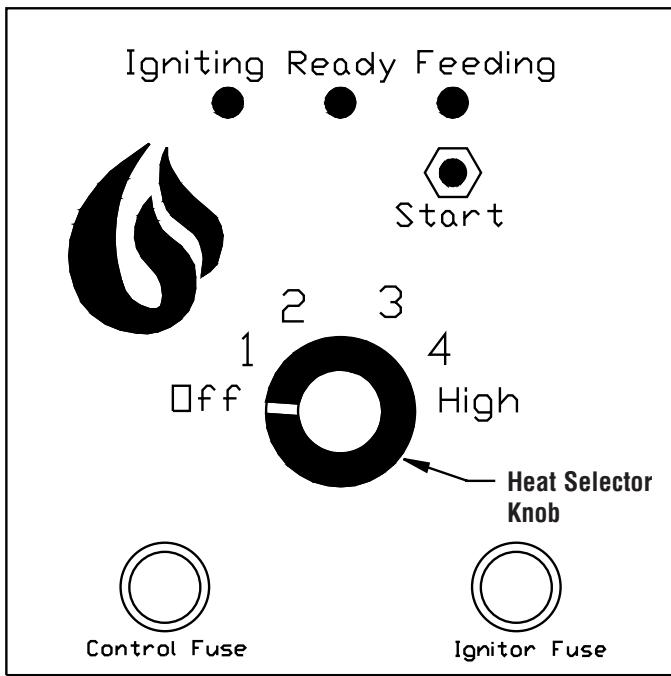


Figure 42

FILLING THE HOPPER

The hopper can be accessed by lifting the lid at the rear of the top of the stove. The hopper will hold 60 pounds of pellets. Remove any contents from the hopper and fill with pellets.

LIGHTING

1. Turn the heat selector knob (see Figure 42) to the heat level desired - 1 through high - and the ready light will turn green.

2. Push the start button and the ignite and feeding lights will come on and the lighting sequence will begin. For about the next 15 minutes the stove will feed pellets cyclically into the burn pot, the combustion fan will come on, and the igniter will heat up. During this sequence, some smoke in the firebox is to be expected. After the igniting sequence is complete, the stove will begin burning at the level indicated by the heat selector knob.

Note: Upon the stove's initial light up, or if the stove has previously run out of pellets, the auger feed tube may not contain a sufficient number of pellets to allow the stove to continue burning after the ignition sequence. It may be necessary to push the start button a second time to run the start sequence again. It is important to always empty (when cool) the burn pot of pellets before pushing the start button a second time.

WARNING

Never empty pellets from the burn pot into the hopper. Pellets that may appear to be cool may retain enough heat to ignite other pellets resulting in smoke or fire damage.

MANUAL OPERATION

After the stove is burning (see lighting above), the heat selector knob controls the pellet burn rate and the stove's heat output. Turning the knob to setting 1 allows the stove to burn about 1.8 pounds of pellets per hour - about 8,500 BTUs per hour. Turning the knob to high allows the stove to burn 4.7 pounds of pellets per hour - about 39,000 BTUs per hour. Once set, the stove will continue to burn at this rate until shut off.

THERMOSTAT OPERATION

This stove will operate with a low voltage thermostat. See page 10 for instructions on installing the thermostat. Once installed, the thermostat will control the operation of the stove. Important: When connected to a thermostat, it is necessary to push the ignite button for the initial burn, when the electrical flow to the stove is interrupted, if the selector knob is turned to off (and then back on), or if the stove runs out of pellets and therefore shuts off. After the initial ignition sequence, when the thermostat calls for heat (the room temperature is less than the temperature set on the thermostat) and the heat selector knob is not in the off position, the stove will burn at the heat selector knob setting. The higher the setting, the quicker the room will heat up. Once the thermostat no longer calls for heat (the room is up to the desired temperature), the stove will continue to burn for one additional hour at the lowest setting. If the thermostat does not call for heat again during that hour, the stove will shut off. During that hour, if the thermostat calls for heat again, the stove will again burn at the heat selector knob setting until the thermostat no longer calls for heat. If the stove shuts off after that hour it will relight when the thermostat calls for heat.

SHUT DOWN

Normal - To turn the stove off, turn the heat selector knob to off. The fans will continue to operate until the control board completes the shut down cycle.

Power Outage - If the stove loses electrical power for less than 10 seconds it will continue to operate. If the power loss is greater than 10 seconds, the stove will go into the ignition sequence and normal operation when the power is restored. If the stove is connected to a thermostat, the stove will not start the ignition sequence until the thermostat calls for heat.

PAINT CURING

This stove has been painted with StoveBright high temperature metallic paint. It leaves the factory dry to the touch, but completes the curing process as the stove is used. The paint will cure during the first few times the stove is burned. Also some parts of the appliance may be lightly coated with machining oil. Ventilate the house during these first firings as the paint and oil give off carbon dioxide and unpleasant odors. It is recommended that persons sensitive to an imbalance in the indoor air quality avoid the stove during the curing process.

CONVECTION BLOWER OPERATION

Your Winslow™ PS40 stove comes equipped with a temperature activated convection blower that extracts heat from the stove. After the stove warms up, a heat activated switch will turn the fan on. The speed of the fan varies with the burn rate of the stove. The fan will continue to extract heat after the stove shuts off and until it is cooled down.

OPERATING SOUNDS

As the Winslow PS40 stove is burning, a number of normal operational sounds may be heard. Pellets can be heard sliding down the auger tube and into the burn pot. Also, the motor powering the auger can be heard as the control board calls for pellets. Occasionally a loud noise can be heard as the auger cuts a pellet in half. When the blowers come on, the sound of rushing air may be heard. The lower the burn rate the slower the fan operates. Hourly, the combustion fan will blow at a high speed to clean ash from the burn pot.

PELLET FUEL

Pellet fuel is made from sawdust and scrap wood from many different species of wood. Pellets are either 1/4" or 5/16" in diameter and vary in length (see Fuel Specifications on page 3). The Winslow PS40 stove will burn either diameter pellets. Pellets made from hardwoods contain more ash than those made from softwoods. Minerals from ash and sand in the pellets form clinkers under the extreme temperatures in the burn pot. Try burning various brands of pellets until you find one that burns with minimum ash and clinkers.

Once you find a pellet brand that burns well, continue using this brand. High ash fuel increases the frequency of stove cleaning. Fuel with an excessive moisture content may jam the auger assembly.

CORN FUEL

Shelled corn can be burned in the Winslow PS40 stove when it is mixed with wood pellet fuel (see Fuel Specifications on page 3). The mixture can contain a maximum of 50 percent corn. Burning corn may create more ash than wood pellets and may necessitate the need to clean the burn pot and glass more frequently.

CAUTIONS

INSTALLATION AND REPAIR SHOULD ONLY BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. DO NOT ATTEMPT TO SERVICE THE APPLIANCE YOURSELF.

Avoid overfiring the stove - do not hand feed pellets to the appliance.

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or fresh up a fire in this heater. Keep all such liquids well away from the heater while it is in use.

For your safety, do not install or operate your Winslow PS40 stove without first reading and understanding this manual. Any installation or operation of the appliance deviating from that which is stated in this instruction manual WILL void the warranty and may be hazardous.

Due to high temperatures, the stove should be located out of traffic areas and away from furniture and draperies. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the Winslow PS40 stove. Clothing or any other flammable material should not be placed on or near the stove. Any grill, panel, or glass removed for service MUST be replaced prior to operating the stove.

Do not operate appliance with the glass front removed, cracked, or broken. Replacement of the glass should be done by a qualified service technician.

Lennox Hearth Products, its employees, or any of its representatives assume no responsibility for any damages caused by an inoperable, inadequate, or unsafe condition as a result of any improper operation, service, or installation procedures, whether direct or indirect.

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70.

Cleaning and Maintenance

Unplug and let the Winslow™ PS40 stove cool before performing any maintenance or cleaning. Some brands of pellets produce more ash and clinkers than others. Therefore the frequency of performing the following cleaning procedures depends to a great degree on the quality of the pellets burned. **Not cleaning this unit will cause it to burn poorly and will void your stove's warranty.**

BURN POT CLEANING

The combustion fan comes on at high speed once an hour to blow the byproducts of combustion out of the burn pot. However, the burn pot should be cleaned more thoroughly after burning about 10 bags of pellets. The burn pot has a number of holes in the bottom and sides that provide combustion air to the pellets. The extreme temperatures in the burn pot can cause the impurities in the pellets to form ash and clinkers. When the stove is cool, open the front door and lift out the cast iron burn pot. Scrape the inner bottom and sides of the pot with a screwdriver to remove all ash and clinkers from these surfaces. Make sure all the holes in the pot are open. Place the burn pot in the hole from which it was removed. Make sure the high side of the pot is rotated toward the front of the stove (see Figure 43). Push the burn pot down so surface A is tight against the steel supporting the pot. Do not substitute any other grate or pot for use in this stove.

CLEANING GLASS

Caution: Do not open the front door when the stove is hot. To open the door, follow the first two steps listed in Front Door Removal (see page 22). Clean the glass using a soft cloth or paper towel and Windex or wood stove window cleaner. A damp cloth with a small amount of ash from the firebox can also be used to clean the glass.

ASH DRAWER REMOVAL AND CLEANING

Caution: Do not remove the ash drawer when the stove is hot. To remove the ash drawer, swing open the left and right side doors. Rotate the lever on latch B (see Figure 44) out from the stove to release the ash drawer. Do the same with the latch on the right side of the stove. Pull the ash drawer forward and away from the stove.

Caution: Disposal of Ashes - Ashes should be placed in a metal container with a tight fitting lid. The closed container should be placed on a non-combustible floor or the ground - well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

Reinstall the ash drawer by inserting the drawer in the stove and refastening the left and right latches securely. Note that if the ash drawer does not seal tightly to the stove, the control board may detect a leak and shut the stove down.

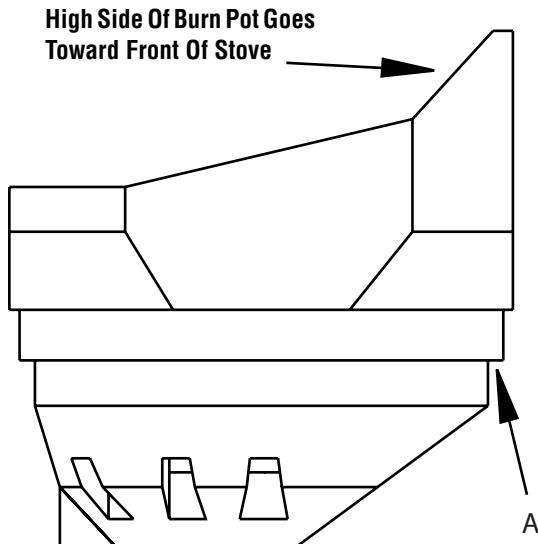


Figure 43

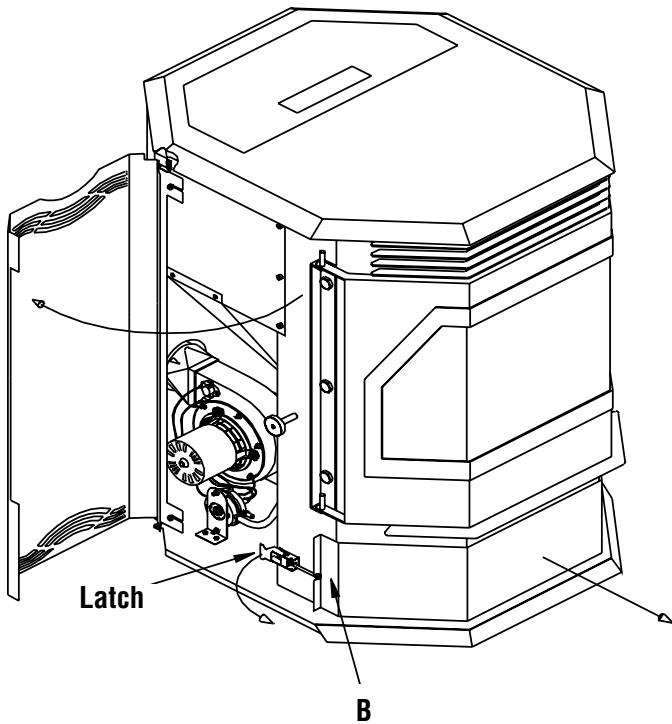


Figure 44

CLEANING THE HEAT EXCHANGER

Caution: Do not operate the heat exchange scraper when the stove is hot. Located at the center of the grill on the top front of the stove is a bent rod that is attached to a scraper on the heat exchange tubes. To remove ash build-up and maintain efficient heat extraction from the stove, this rod should be pulled in and out at least once a week.

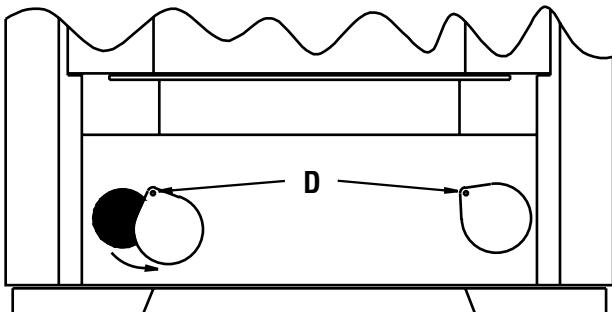
CLEANING THE COMBUSTION BLOWER

To clean the combustion blower, remove the six nuts labeled A in Figure 46 with an 11/32" wrench. After removing these nuts, the motor with fan attached can be pulled from the fan housing. The fan blades and the fan housing can be vacuumed once the motor is removed. When reinstalling the motor, a new gasket may need to be installed between the motor and the fan housing. To complete the reinstallation, place the motor back on the fan housing and reinstall the six nuts. Make sure the motor's green ground wire is secured under one of the nuts.

CLEANING THE FLUE GAS PASSAGEWAYS

Cleaning the flue gas passageways should be done at least once a year. Burning high ash pellets may require this cleaning to be done more often. Clean these passageways only when the stove and ash are cold - do not start a fire in the vacuum cleaner by vacuuming up hot ash. On each side of the stove there are two access covers (see B and C in Figure 47) that can be removed by unscrewing the two 5/32" allen head screws. Insert a cleaning brush in the openings to loosen any ash build-up and use a vacuum cleaner to remove the loosened ash. Reinstall the covers when cleaning is complete.

There are also two more access holes located behind the ash drawer. Remove the ash drawer (see previous page) and loosen the two 5/16" screws with a 1/2" socket or wrench, the screws are shown as D in Figure 45. Rotate the covers over the access holes and use a brush and vacuum to clean the ash. Rotate the covers back over the holes and tighten the screws.



Front View Looking into the Ash Drawer Cavity with the Ash Drawer Removed

Figure 45

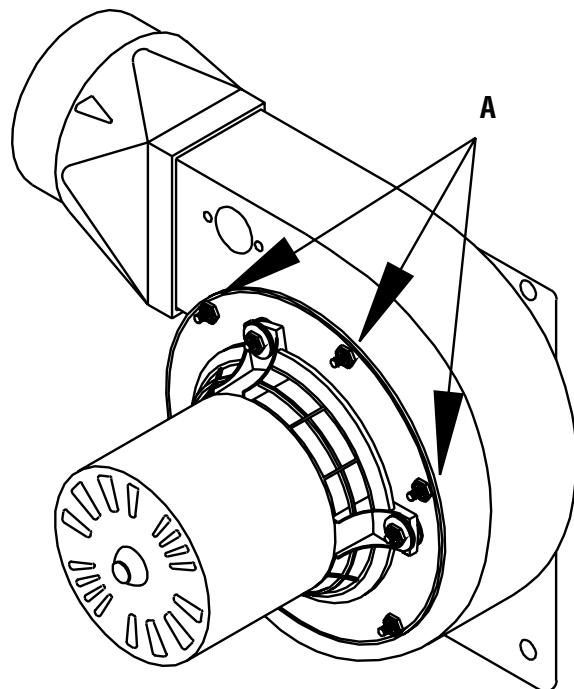


Figure 46

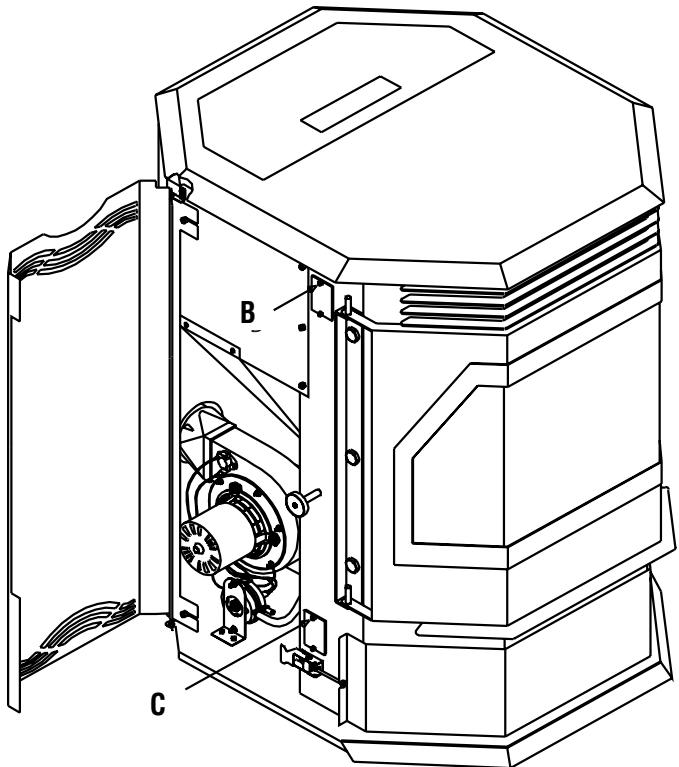


Figure 47

FRONT DOOR REMOVAL

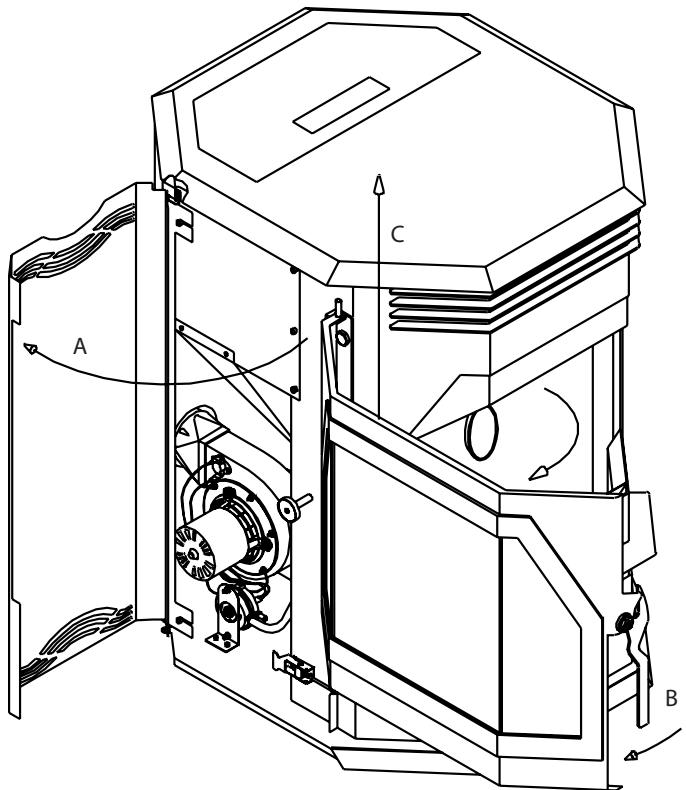
Caution: Do not open the front door when the stove is hot.
To remove the door, swing the left and right side doors A open. Pull the front door handle B to the front and swing the front door open. Lift the front door up and off the hinges as shown in C in Figure 49. To reinstall the door repeat the steps in reverse order.

SIDE DOOR REMOVAL

To remove the door,

- 1 Swing the door open,
- 2 Lift the door up, and
3. Pull the bottom of the door out and down - pulling the top hinge pin out of the retaining hole in the top hinge bracket.

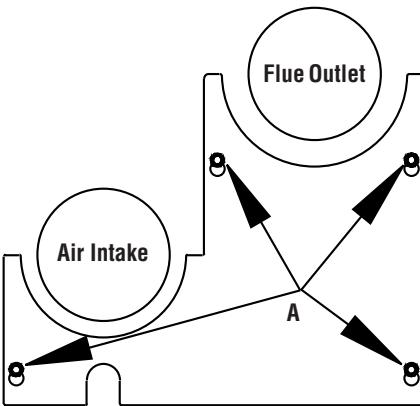
To reinstall the door, slide the pin on the top of the door up and into the hole in the upper hinge bracket. Slide the pin on the bottom of the door into the hole in the pedestal base and rotate the door closed.



BACK REMOVAL AND LOWER COVER PLATE

To remove the back:

1. Remove the left and right side panels (see the previous page).
2. If the stove is connected to the vent pipe, loosen the four 5/32" allen head screws (see A in Figure 51) securing the lower cover plate beneath the flue outlet, lift the plate slightly, and pull the plate off.
3. Loosen the two screws B and C shown in Figure 52 and the corresponding two screws on the other side of the stove. The back can now be pulled to the rear and off of the stove.



To reinstall the back, follow the steps just listed - but in the reverse order.

COMPONENT INFORMATION

The following is a list of components and their functions.

Igniter

The Winslow™ PS40 stove comes equipped with an automatic igniter for lighting the fuel when the stove is in the lighting mode. The igniter superheats air that is pulled through the burn pot by the combustion blower to light the fuel. The igniter remains energized for the first seven minutes of the lighting sequence.

Vacuum Switch

The Winslow PS40 stove has a vacuum switch located behind the left door, fastened to the pedestal base (see D in Figure 52). If a low pressure is created in the firebox by a leak, opening the front door, a blocked flue, or unsealed ash drawer, the vacuum switch will sense it and cause the stove to go into a shutdown mode.

Auger and Auger Motor

The 1.25 RPM auger motor turns the auger, lifting pellets up the auger tube. The pellets are then dropped down a tube and into the firepot. The auger is controlled by the control board.

Over Temperature Snap Switch (Manual Reset)

(Opens at 225F) This switch is installed on the convection blower (see F in Figure 53) and shuts the stove down if it senses excessive temperatures. This snap switch has a reset button on it and will not allow the stove to start up until the reset button has been pushed.

Proof of Fire Snap Switch

(Closes at 140F) This switch is installed on the combustion blower (see E in Figure 52) and shuts the stove down if it senses no fire in the burn pot.

Convection Blower Snap Switch

(Closes at 120F) This switch is installed on the right rear of the firebox and turns the convection blower on when the stove gets up to temperature.

DRAFT ADJUSTER

The Winslow™ PS40 stove has a draft adjuster located at the left side of the stove directly in front of the combustion blower. Should the stove installation require long runs of vent pipe, a situation may be created where excessive combustion air is flowing through the firebox and causing the fuel to burn faster than it can be delivered to the burn pot. Should this happen, the draft can be slowed down by the adjuster. The stove is shipped with the adjuster in the fully open position. To slow the draft down, loosen the 5/32" allen head screw (A in Figure 54) and move the adjuster handle toward the center of the stove. Retighten the screw when the desired adjustment is reached.

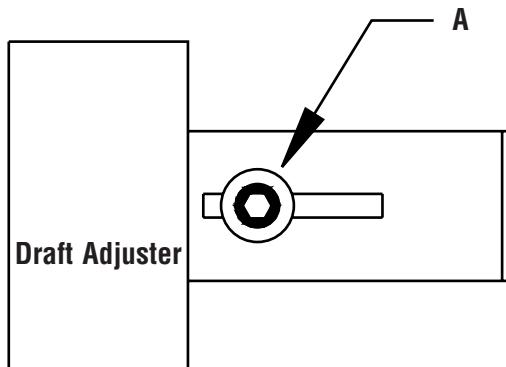


Figure 54

WIRING DIAGRAM

10	9	8	7	6
YEL	RED	WHT	GRY	BRWN
5	4	3	2	1
ORNG	BLK	GRN	BLU	VIOL

Molex 10 Pin Connector

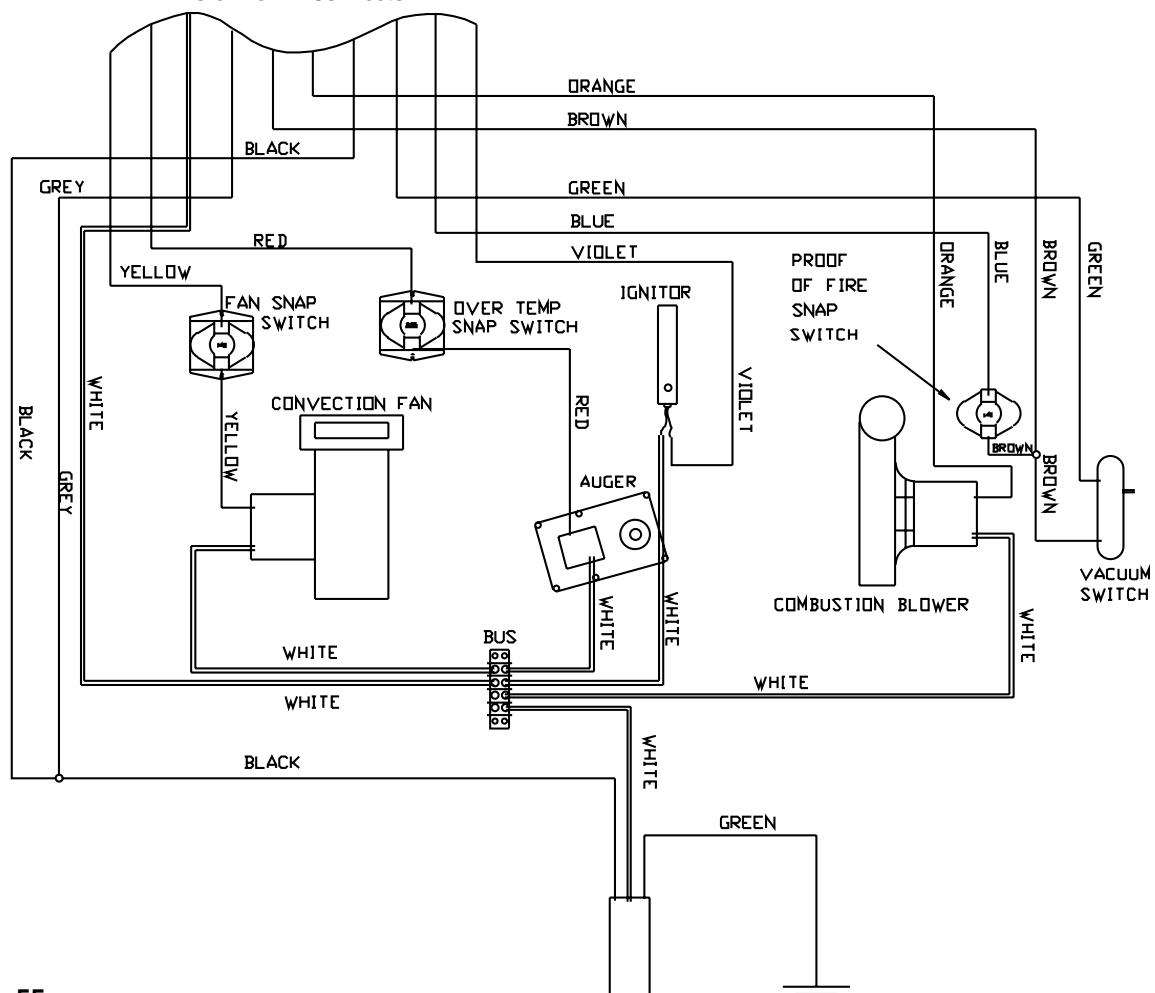


Figure 55

DIAGNOSTIC CODES

If the stove operates abnormally, the ready light on the control board will signal the nature of the abnormal operation. The following is a list of possible signals or codes:

Ready light is constant red
Ready light flashes red 1 short and 1 long blink
Ready light flashes red 2 short blinks
Ready light flashes red 2 long blinks

Ignition Failure
Vacuum Switch Open
Proof of Fire Snap Switch Open
Over Temperature Snap Switch Open

TROUBLESHOOTING

Ignition Failure - Code - Ready light is constant red and ignite light flashes two short blinks	
Possible Problem	Solution
Hopper is out of pellets	Fill the hopper with pellets
Auger tube was not full of pellets when start button was pushed	When cool, empty pellets in burn pot and push start button again
Burn pot dirty - holes plugged	Clean the burn pot
Igniter not functioning	Replace the igniter
Igniter fuse blown	Replace 6 amp fuse located on front of the control board

Control Board has no Power - When selector knob is turned no lights light up	
Possible Problem	Solution
Power cord is not plugged in	Plug in power cord
Board fuse blown	Replace 3 amp fuse located on front of control board
Wall outlet not energized	Check circuit breaker panel
Board broken, damaged, or defective	Replace the control board

Vacuum Switch Shuts Stove Down - Code - Ready light flashes red 1 short and 1 long blink	
Possible Problem	Solution
Front door is not sealing	Latch or adjust the front door or replace door gasket
Ash drawer is not sealing	Close latches, adjust latches, or replace drawer gaskets
Flue gas passageways restricted	Clean the passageways (see page 20)
Vent pipe restricted	Clean the vent pipe (see page 21)
Vacuum hose plugged	Clean or replace the vacuum hose
Vacuum switch defective	Replace the vacuum switch

Proof of Fire Snap Switch Shuts Stove Down - Code - Ready light flashes red 2 short blinks	
Possible Problem	Solution
Hopper is out of pellets	Fill the hopper with pellets
Auger tube was not full of pellets when start button was pushed	When cool, empty pellets in burn pot and push start button again
Snap switch* defective	Replace the snap switch

Over Temperature Snap Switch Shuts Stove Down - Code - Ready light flashes red 2 long blinks	
Possible Problem	Solution
Convection blower not running	Blower dirty, blower snap switch bad, or blower broken
Flue passageways or vent restricted	Clean passageways or vent pipe (see pages 20 & 21)
Snap switch* defective	Replace the snap switch*

* Note: The snap switch has a reset button that must be pushed before stove will function (see page 23).

Orange Sooty Flames - Glass turns Black	
Possible Problem	Solution
Burn pot is dirty	Clean the burn pot
Vent pipe restricted	Clean the vent pipe
Flue gas passageways restricted	Clean the passageways
Combustion blower dirty	Clean the combustion blower

Pellets not Feeding	
Possible Problem	Solution
Hopper empty	Fill the hopper
Auger jammed	Call service technician
Flue gas passageways restricted	Call service technician
Auger motor not operating	Call service technician

ELECTRICAL GENERATOR OPERATION

Your Winslow™ PS40 stove can be powered with a gas driven electrical generator. However, the generator's electrical regulator may not be compatible with the stove's electronics. The higher the quality of the generator, the greater the chance that it is compatible with the stove.

REPLACEMENT PARTS

Winslow PS40 stove

Cat. No.	Description
H6006	Adjustable Latch Pin
H3111	Ash Clean Out Cover, 2 Per Stove
H3113	Ash Drawer
H5912	Ash Drawer Latch W/hardware 2 Per Stove
H5886	Auger Motor
H5921	Auger W/lower Bearing
H5875	Blower Snap Switch
H5856	Cast Burn Pot
H5899	Cleanout Cover Gasket
H6018	Combustion Blower
H5900	Combustion Gasket Housing To Stove
H5903	Combustion Gasket Motor To Housing
H5917	Conrol Board Access Latch
H5978	Control Board
79020	Control Board Fuse 3amp, 5pk
H5884	Convection Blower
H5902	Convection Blower Gasket
H5904	Door Gasket 1 Ft (7ft Per Door)
H3112	Door Handle Assembly
79040	Door W/glass (No Trim)
H6037	Flue Restrictor W/hardware
H5911	Hopper Door Wire
79021	Igniter Fuse 6amp, 5pk
H6005	Igniter W/hose Clamp
H5891	Overtemp Switch
H6004	Power Cord
H5887	Proof Of Fire Switch
H3114	Side Ash Cover Clean Out
H6174	Side Door, Left
H5916	Side Door Magnet
H5833	Side Door W/control Access, Right
H5832	Stove Back
H6035	Stove Back Cover Plate
H6036	Top Side Door Bracket, Right
H6175	Top Side Door Bracket, Left
H5898	Vacuum Line 12" Piece
H5889	Vacuum Switch
H5892	Wiring Harness

WARRANTY

Your pellet stove is covered by a limited warranty (provided with appliance). Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. Please contact your Lennox Hearth Products dealer for any questions or concerns. For the number of your nearest Lennox Hearth Products dealer, please call 1-800-9-LENNOX.

REPLACEMENT PARTS

See **Page 26** for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your Lennox Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

1. The model number of the appliance.
2. The serial number of the appliance.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.

LENNOX HEARTH PRODUCTS

PO Box 987
Auburn, WA 98071
Visit us at www.Lennox.com

Your Stove's Model Number _____

Your Stove's Serial Number _____

The Date On Which Your Stove Was Installed _____

Your Dealer's Name _____

Your Dealer's Phone Number _____



We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



Lennox™ reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

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